

AMENDMENTS

IN THE CLAIMS:

Claims 1-21 (Canceled)

- 1 22. (Currently Amended) A furnace comprising:
2 a housing forming an enclosure;
3 a heating means for heating the enclosure;
4 an opening formed in the housing; and
5 a vertical rotating means disposed in the enclosure ~~The furnace as~~
6 ~~claimed in claim 21~~, wherein the vertical rotating means comprise a pair of
7 rotating chains carrying a plurality of trays at respective tray apexes and a pair
8 of fixed rings carrying the plurality of trays at respective tray bases.
- 1 23. (Previously Presented) The furnace as claimed in claim 22,
2 wherein the pair of rotating chains and the pair of fixed rings have geometric
3 centers vertically offset from each other.
- 1 24. (Previously Presented) The furnace as claimed in claim 22,
2 wherein the plurality of trays are attached to the pair of rotating chains and the
3 pair of fixed rings by a four bar linkage.
- 1 25. (Previously Presented) The furnace as claimed in claim 22,
2 wherein the plurality of trays are alternatively accessible through the opening.
- 1 26. (Previously Presented) The furnace as claimed in claim 22,
2 wherein the pair of rotating chains are disposed in a top portion of the enclosure
3 and the pair of fixed rings are disposed in the bottom portion of the enclosure.

1 27. (Previously Presented) The furnace as claimed in claim 22,
2 wherein the pair of rotating chains and the pair of fixed rings are circular.

1 28. (Previously Presented) The furnace as claimed in claim 22,
2 wherein the pair of rotating chains and the pair of fixed rings are elliptical.

1 29. (Previously Presented) The furnace as claimed in claim 22,
2 wherein the pair of rotating chains and the pair of fixed rings have an irregular
3 shape.

1 30. (Previously Presented) The furnace as claimed in claim 22,
2 wherein the tray bases are maintained in a horizontal orientation by the pair of
3 fixed rings.

1 31. (Currently Amended) The furnace as claimed in claim 22
2 [[21]], wherein the vertical rotating means comprises a motor.

1 32. (Currently Amended) The furnace as claimed in claim 22
2 [[21]], further comprising a heat exchanger.

1 33. (Currently Amended) The furnace as claimed in claim 22
2 [[21]], further comprising a flux pot.

1 34. (Currently Amended) The furnace as claimed in claim 22
2 [[21]], further comprising a wave soldering unit.

1 35. (Currently Amended) The furnace as claimed in claim 22
2 [[21]], wherein the vertical rotating means comprise a pair of rotating rings
3 carrying a plurality of trays at respective tray apexes and a pair of fixed rings
4 carrying the plurality of trays at respective tray bases.

1 36. (Previously Presented) The furnace as claimed in claim 35,
2 wherein the pair of rotating rings and the pair of fixed rings have geometric
3 centers vertically offset from each other.

1 37. (Previously Presented) The furnace as claimed in claim 35,
2 wherein the plurality of trays are attached to the pair of rotating rings and the
3 pair of fixed rings by a four bar linkage.

1 38. (Previously Presented) The furnace as claimed in claim 35,
2 wherein the pair of rotating rings are disposed in a top portion of the enclosure
3 and the pair of fixed rings are disposed in the bottom portion of the enclosure.

1 39. (Previously Presented) A furnace comprising:
2 a housing forming an enclosure;
3 an opening formed in the housing; and
4 a pair of rotating chains carrying a plurality of trays at respective
5 tray apexes and a pair of fixed rings carrying the plurality of trays at respective
6 tray bases, the pair of rotating chains and the pair of fixed rings being disposed
7 in the enclosure.

1 40. (Previously Presented) The furnace as claimed in claim 39,
2 wherein the fixed rings comprise a web-type frame.

1 41. (Previously Presented) The furnace as claimed in claim 39,
2 further comprising a heating means for heating the enclosure.

1 42. (Previously Presented) The furnace as claimed in claim 39,
2 further comprising a flux pot.

1 43. (Previously Presented) The furnace as claimed in claim 39,
2 further comprising a wave soldering unit.

1 44. (Previously Presented) A furnace comprising:
2 a housing forming an enclosure;
3 an opening formed in the housing; and
4 a pair of rotating rings carrying a plurality of trays at respective tray
5 apexes and a pair of fixed rings carrying the plurality of trays at respective tray
6 bases, the pair of rotating rings and the pair of fixed rings being disposed in the
7 enclosure.

1 45. (Previously Presented) The furnace as claimed in claim 44,
2 wherein the fixed rings comprise a web-type frame.

1 46. (Previously Presented) The furnace as claimed in claim 44,
2 further comprising a heating means for heating the enclosure.

1 47. (Previously Presented) The furnace as claimed in claim 44,
2 further comprising a flux pot.

1 48. (Previously Presented) The furnace as claimed in claim 44,
2 further comprising a wave soldering unit.

1 49. (Currently Amended) A method of carrying out a processing
2 step on an item to be processed comprising the steps of:
3 providing a furnace having a housing forming an enclosure, an
4 opening formed in the housing, a heating means for heating the enclosure, and
5 a vertical rotating means disposed in the enclosure, the vertical rotating means
6 comprising a pair of rotating chains carrying a plurality of trays at respective tray

- 7 apexes and a pair of fixed rings carrying the plurality of trays at respective tray
- 8 bases; and
- 9 rotating the item to be processed within the enclosure.